

The following listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Presently Amended) A process for producing a gasoline stock with a high octane number by hydroisomerizing ~~hydroisomerisation of a C5 - C8 feed in at least one hydroisomerisation section (2) constituted by a cut in the range C5 to C8, comprising at least one reactor, and performing separation in at least one adsorption separation section (4) comprising at least one separation unit, hydroisomerisation section and at least one separation section functioning by adsorption, characterized in that said adsorption separation section containing~~ contains at least one zeolitic adsorbent with at least two types of channels, principal channels with an opening defined by a ring of 10 oxygen atoms (10-MR) and secondary channels with an opening defined by a ring of at least 12 oxygen atoms (at least 12 MR), wherein said feed can only access said secondary channels only being accessible to the feed to be separated via the principal channels,

wherein said separation section (4) produces at least two fluxes, a first flux (8, 18) that is rich in dibranched and tribranched paraffins, optionally in naphthenes and aromatics, which is sent to a gasoline pool, and a second flux (7, 9) that is rich in linear and monobranched paraffins that is delivered to the inlet to the hydroisomerisation section (2).

2. (Presently Amended) A process according to claim 1, wherein ~~characterized in that~~ said adsorbent in the separation section contains silicon and at least one element T selected from ~~the group formed by~~ aluminium, iron, gallium and boron, and wherein the Si/T mole ratio is being at least 10.

3. - 22. (Cancelled)

23. (Previously Presented) A process according to claim 1, wherein said zeolitic adsorbent in the separation section is a zeolite with structure type EUO.

24. (Previously Presented) A process according to claim 1, wherein said zeolitic adsorbent in the separation section is a zeolite with structure type NES.

25. (Previously Presented) A process according to claim 1, wherein said zeolitic adsorbent in the separation section is a zeolite with structure type MWW.

26. (Previously Presented) A process according to claim 1, wherein said zeolitic adsorbent in the separation section is a NU-85 zeolite.

27. (Previously Presented) A process according to claim 1, wherein said zeolitic adsorbent in the separation section is a NU-86 zeolite.

28. (Previously Presented) A process according to claim 1, wherein said zeolitic adsorbent comprises a zeolite with a EUO, NES, or MWW structure, or an NU-85 or NU-86 zeolite, said zeolitic adsorbent being mixed with zeolite type LTA.

29. (Cancelled)

30. (Presently Amended) A process for producing a gasoline stock with a high octane number by hydroisomerizing a C5 - C8 feed in at least a first hydroisomerization section and a second hydroisomerization section, and performing separation in at least one adsorption separation section (4) comprising at least one separation unit, said adsorption separation section containing at least one zeolitic adsorbent with at least two types of channels, principal channels with an opening defined by a ring of 10 oxygen atoms and secondary channels with an opening defined by a ring of at least 12 oxygen atoms, wherein said feed can only access said secondary channels via the principal channels,

~~A process according to claim 1, comprising at least two hydroisomerisation sections (2, 3) and at least one separation section (4), in which the~~ wherein said separation section produces three fluxes, a first flux (8, 18, 28, 38) that is rich in dibranched and tribranched paraffins, optionally in naphthenes and aromatic compounds that is sent to ~~a~~ the gasoline pool, a second flux (11, 16, 20, 24, 30, 36) that is rich in linear paraffins that is delivered ~~recycled~~ to the inlet to the first hydroisomerisation section and at third flux (12, 21, 26, 34, 35, 39) that is rich in monobranched paraffins that is delivered ~~recycled~~ to the inlet to the second hydroisomerisation section (3).

31. (Previously Presented) A process according to claim 30, wherein the whole of the effluent from the first hydroisomerisation (2) section traverses the second section (3).

32. (Previously Presented) A process according to claim 31, wherein the separation section (4) is located downstream of the hydroisomerisation sections (2, 3), the feed (1) is mixed with the recycle of paraffins (30) from the separation section (4), the resulting mixture (33) is sent to the first hydroisomerisation section (2), the effluent leaving the first hydroisomerisation section is mixed with the flux that is rich in monobranched paraffins (39) from the separation section (4), then the mixture is sent to the second hydroisomerisation section (3), and the effluent (37) from said latter section is sent to the separation section (4).

33. (Previously Presented) A process according to claim 31, wherein the separation section (4) is located upstream of hydroisomerisation sections (2, 3), the feed (1) is mixed with the flux (14) from the second hydroisomerisation section (3), then the resulting mixture (23) is sent to the separation section (4), the linear paraffin-rich effluent (11) is sent to the first hydroisomerisation section (2), the monobranched paraffin-rich flux (12) from the section (4) for separating an effluent (13) from the first hydroisomerisation section (2) is added, and the ensemble is sent to the second hydroisomerisation section (3).

34. (Previously Presented) A process according to claim 30, wherein the effluents from the hydroisomerisation sections are sent to at least one separation section.

35. (Presently Amended) A process according to claim 1, wherein characterized ~~in that~~ at least one light fraction is separated by distillation upstream or downstream of the hydroisomerisation (2, 3) and/or separation (4, 5) sections.

36. (Previously Presented) A process according to claim 1, wherein the feed contains a C5 cut and at least one deisopentaniser and/or at least one depentaniser is/are located upstream or downstream of the hydroisomerisation (2, 3) and/or separation (4, 5) sections.

37. (Previously Presented) A process according to claim 1, wherein the feed contains a C6 cut but contains no C5 cut, and at least one deisohexaniser is disposed upstream or downstream of the hydroisomerisation (2, 3) and/or separation (4, 5) sections.

38. (Previously Presented) A process according to claim 35, wherein the light fraction, or the isopentane and/or pentane and/or a mixture of the two, or hexane, act as an eluant for the adsorption separation section.

39. (Previously Presented) A process according to claim 1, butane and/or isobutane is used as an eluant for the adsorption separation section.

40. (Previously Presented) A process according to claim 36, wherein the resultant isopentane is sent to the gasoline pool.

41. (Previously Presented) A process according to claim 1, wherein hydroisomerisation is carried out at temperatures in the range 25°C to 450°C, at a pressure in the range 0.01 to 0.7 MPa, at a space velocity, measured in kg of feed per kg of catalyst per hour, in the range 0.5 to 2, and with a H₂/hydrocarbon mole ratio in the range 0.01 to 50.

42. (Previously Presented) A process according to claim 1, wherein separation is carried out at temperatures in the range 50°C to 450°C and at a pressure in the range 0.01 to 7 MPa.

43. (New) A process according to claim 30, wherein said adsorbent in the separation section contains silicon and at least one element T selected from aluminium, iron, gallium and boron, and wherein the Si/T mole ratio is at least 10.

44. (New) A process according to claim 30, wherein said zeolitic adsorbent in the separation section is a zeolite with structure type EUO.

45. (New) A process according to claim 30, wherein said zeolitic adsorbent in the separation section is a zeolite with structure type NES.

46. (New) A process according to claim 30, wherein said zeolitic adsorbent in the separation section is a zeolite with structure type MWW.

47. (New) A process according to claim 30, wherein said zeolitic adsorbent in the separation section is a NU-85 zeolite.

48. (New) A process according to claim 30, wherein said zeolitic adsorbent in the separation section is a NU-86 zeolite.

49. (New) A process according to claim 30, wherein said zeolitic adsorbent comprises a zeolite with a EUO, NES, or MWW structure, or an NU-85 or NU-86 zeolite, said zeolitic adsorbent being mixed with zeolite type LTA.

50. (New) A process according to claim 30, wherein at least one light fraction is separated by distillation upstream or downstream of the hydroisomerisation and/or separation sections.

51. (New) A process according to claim 30, wherein the feed contains a C5 cut and at least one deisopentaniser and/or at least one depentaniser is/are located upstream or downstream of the hydroisomerisation and/or separation sections.

52. (New) A process according to claim 30, wherein the feed contains a C6 cut but contains no C5 cut, and at least one deisohexaniser is disposed upstream or downstream of the hydroisomerisation and/or separation sections.

53. (New) A process according to claim 50, wherein the light fraction, or the isopentane and/or pentane and/or a mixture of the two, or hexane, act as an eluant for the adsorption separation section.

54. (New) A process according to claim 30, butane and/or isobutane is used as an eluant for the adsorption separation section.

55. (New) A process according to claim 51, wherein the resultant isopentane is sent to the gasoline pool.

56. (New) A process according to claim 30, wherein hydroisomerisation is carried out at temperatures in the range 25°C to 450°C, at a pressure in the range 0.01 to 0.7 MPa, at a space velocity, measured in kg of feed per kg of catalyst per hour, in the range 0.5 to 2, and with a H₂/hydrocarbon mole ratio in the range 0.01 to 50.

57. (New) A process according to claim 30, wherein separation is carried out at temperatures in the range 50°C to 450°C and at a pressure in the range 0.01 to 7 MPa.

58. (New) A process for producing a gasoline stock with a high octane number by hydroisomerizing a C5 - C8 feed in at least one hydroisomerisation section (2) comprising at least one reactor, and performing separation in at least one adsorption separation section (4) comprising at least one separation unit, said adsorption separation section containing at least one zeolitic adsorbent with at least two types of channels, principal channels with an opening defined by a ring of 10 oxygen atoms and secondary channels with an opening defined by a ring of at least 12 oxygen atom, wherein said feed can only access said secondary channels via the principal channels, wherein said zeolitic adsorbent comprises a zeolite with a NES or MWW structure, or an NU-85 or NU-86 zeolite.

59. (New) A process for producing a gasoline stock with a high octane number by hydroisomerizing a C5 - C8 feed in at least one hydroisomerisation section (2) comprising at least one reactor, and performing separation in at least one adsorption separation section (4) comprising at least one separation unit, said adsorption separation section containing at least one zeolitic adsorbent with at least two types of channels, principal channels with an opening defined by a ring of 10 oxygen atoms and secondary channels with an opening defined by a ring of at least 12 oxygen atom, wherein said feed can only access said secondary channels via the principal channels, wherein said zeolitic adsorbent comprises a zeolite with a EUO, NES, or MWW structure, or an NU-85 or NU-86 zeolite, said zeolitic adsorbent being mixed with zeolite type LTA.

60. (New) A process according to claim 1, wherein said first flux consists essentially of dibranched and tribranched paraffins, and said second flux consists essentially of linear and monobranched.

61. (New) A process according to claim 30, wherein said first flux consists essentially of dibranched and tribranched paraffins, said second flux consists essentially of linear paraffins and said third flux consists essentially of monobranched paraffins.